

AMENDMENTS TO THE CLAIMS

Please substitute the following pending claims 71-87 as replacement claims for the previously-pending claims. In this Amendment After Final, claim 71 has been amended, claim 84 has been canceled. No new claims have been added.

Claims 1-70 (canceled)

71. (currently amended) A prosthetic material comprising:
 a scaffold having interconnecting, uniformly shaped pores, the pores having the general shape of a sphere; and
 an ingrowth matrix within the pores, wherein the ingrowth matrix comprises a concentration gradient of a material.
72. (original) The prosthetic material of Claim 71 wherein the material in the concentration gradient comprises a synthetic material.
73. (original) The prosthetic material of Claim 72 wherein the synthetic material comprises a hydrogel.
74. (original) The prosthetic material of Claim 71 wherein the material in the concentration gradient comprises a protein.
75. (original) The prosthetic material of Claim 74 wherein the protein is selected from the group consisting of fibrin, collagen, glycosaminoglycan, and combinations thereof.
76. (original) The prosthetic material of Claim 71 wherein the material in the concentration gradient comprises a protein and a synthetic material.
77. (original) The prosthetic material of Claim 71 wherein the material in the concentration gradient comprises a growth factor.

78. (original) The prosthetic material of Claim 71 wherein the material in the concentration gradient comprises a peptide.

79. (original) The prosthetic material of Claim 71 wherein the concentration gradient comprises a delivered gene.

80. (original) The prosthetic material of Claim 71 wherein the concentration gradient comprises a fibrin matrix.

81. (original) The prosthetic material of Claim 71 wherein the concentration gradient comprises a polyethylene glycol matrix.

82. (original) The prosthetic material of Claim 71 further comprising interconnecting, helically oriented channels within the scaffold.

83. (original) The prosthetic material of Claim 71 wherein substantially all of the pores have diameters within 300 μm of one another.

84. (canceled) The prosthetic material of Claim 71 wherein the pores are spherically shaped.

85. (original) The prosthetic material of Claim 71 comprising a vascular graft.

86. (original) The prosthetic material of Claim 71 comprising a sewing ring.

87. (original) The prosthetic material of Claim 71 comprising a synthetic heart valve.

Claims 88-102 canceled.